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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/072,641	02/07/2002	Gregory L. Verdine	H00498/70118 TJO/TC	3255

23628 7590 05/01/2003

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EXAMINER
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MCINTOSH III, TRAVISS C

ART UNIT	PAPER NUMBER
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1623

DATE MAILED: 05/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/072,641

Applicant(s)

VERDINE ET AL.

Examiner

Traviss C McIntosh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 September 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-48 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - I. Claims 1-7 and 31-36, drawn to a compound and methods for preparing same defined by the structure in claim 1, classified in class 536, subclass 26.26.
  - II. Claims 8-11, drawn to a method of synthesizing a DNA comprising the compound defined by the structure in claim 8, classified in class 536, subclass 25.3.
  - III. Claims 12-13, drawn to a method of synthesizing a DNA comprising the compound defined by the structure of claim 12, classified in class 435, subclass 91.1.
  - IV. Claims 14-20, drawn to a method of analyzing or characterizing a DNA, classified in class 435, subclass 6.
  - V. Claims 21-28, drawn to a method of oxidizing a DNA by reacting with oxidizing agent, classified in class 536, subclass 25.31.
  - VI. Claim 29, drawn to a method of oxidizing a DNA by cleaving double bond X, classified in class 536, subclass 25.31.
  - VII. Claim 30, drawn to a method of oxidizing a DNA by cleaving DNA at the base position, classified in class 536, subclass 25.31.
  - VIII. Claims 37-48, drawn to a composition comprising the compound as defined by the structure in claims 37 and 40, classified in class 536, subclass 28.1.

The inventions are distinct, each from the other because of the following reasons:

2. The claims of the instant application are drawn to a multitude of different compositions and methods. Groups I and VIII are drawn to various compositions which comprise distinct compounds. A search for one of the compounds in the composition would not necessitate a search for the other compounds, further, a reference rendering one group obvious would not necessarily render the other groups obvious. Applicant is not entitled to the examination of multiple compositions comprising patentably distinct compounds.
3. Groups I and II are drawn to distinct methods wherein the compound in claim 1 is incorporated in either end product, wherein the methods differ as one is a method of making a composition, the other a method of synthesizing a DNA, each having different methodological steps. Applicant is not entitled to the search of multiple methods.
4. Groups II and III are drawn to methods of synthesizing a DNA, wherein the DNA is defined as having the compounds in claims 8 and 12 respectively. Applicant is not entitled to the search of multiple methods.
5. Groups IV, V, VI, and VII are drawn to various methods comprising analyzing DNA or oxidizing DNA at various places on the base moiety which all have distinct methodological steps. The search for one method would not necessitate the search for another, and a reference rendering one Group obvious would not necessarily render the other obvious.
6. Groups VII and VIII are drawn to compositions which comprise distinct compounds which are defined in claims 37 and 40 respectively. The search for one composition would not

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necessitate the search for another, and a reference rendering one Group obvious would not necessarily render the other obvious.

7. Because these inventions are distinct for the reasons given above and the search required for one Group is not required for another Group, and because they have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. To search the independent and distinct inventions of Groups I-VIII would indeed impose an undue burden upon the examiner in charge of this application.

8. This application contains claims directed to the following patentably distinct species of the claimed invention: claim 37 is drawn to a multitude of species wherein  $R^3$  can be any atom, and claim 40 comprises various species of thiols, esters, or amines.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the

- species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

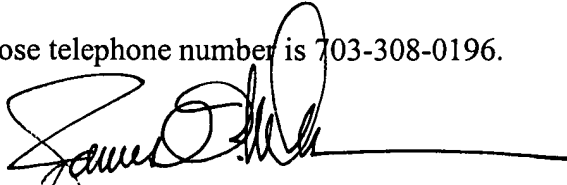
9. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Traviss C McIntosh whose telephone number is 703-308-9479. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 703-308-4624. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-305-3014 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.



James O. Wilson  
Supervisory Patent Examiner  
Art Unit 1623

Traviss C. McIntosh  
April 30, 2003